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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

John H. Hiett

Serial No.: 09/

09/224,214

Filing Date: December 30, 1998

Title:

APPARATUS AND METHOD FOR

DATA COMMUNICATIONS

Client Ref.:

A62-25262-US

Docket No.: Group Art:

Examiner

46180,7800

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Brenda H. Pham

# RESPONSE TO OFFICE ACTION

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

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Technology Center 2600

In response to the Office Action dated February 13, 2002, please amend the above identified application as follows:

06/06/2002 NMCGEE1 00000003 192814 09224214

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## IN THE SPECIFICATION

Please amend the paragraph at page 11, lines 7-21, in the specification as follows:

Information requests are transmitted to the data source 104 by the transmission unit 206 via first communication medium 208. Moreover, the transmission unit 206 may also be configured as a transceiver to receive data signals from data source 104 through transmission medium 208 or from various components within transmission medium 208, e.g., an aeronautical satellite system 310, a VHF ground station 412, or a ground-based LAN 512. Accordingly, transmission unit 206 may be configured to validate the contents of the information requests signals sent to the data source 104. In the present embodiment, transmission unit 206 includes

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multiple transmission mechanisms 810 available for transmitting the request to the data source 104, and a selection system 808 for selecting the appropriate transmission mechanism 810. For example, referring now to Figure 8, the transmission unit 206 suitably comprises a selection system 808 and multiple transmission mechanisms 810, such as a satellite transmitter unit 602, a VHF radio unit 406, wireless LAN unit 506, and/or voice channel unit 812. Similarly, first communication medium 208 also suitably includes multiple media corresponding to the various transmission mechanisms, i.e., satellite, VHF radio, wireless, voice and/or direct cable or laser signals.

IN THE CLAIMS

Please cancel claims 2, 4, 5, 11 and 12 without prejudice or disclaimer. Please amend claims 1, 3, 6, 7, 8, 9 and 10 as follows:

 (Amended) A data communications system for retrieving data information, said data communications system comprising:

a data source comprising a network system for the storage and delivery of the data information;

an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source wherein said transmission unit comprises a satellite data unit and a radio frequency unit;

a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising:

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an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network system; and

a radio ground station adapted to receive information request signals from said radio frequency unit, wherein said radio ground station is adapted to transmit data information requests from said radio frequency unit to said network system;

a second communication medium comprising a direct broadcast satellite adapted to receive data information from said data source and to broadcast said data information to said receiver;

a receiver coupled to said data source by said second communication medium and adapted to receive the data information requested by said information request system from said data source; and

wherein said information request system is configured to select one of said aeronautical satellite system and said radio ground station from said first communication medium for transmission of data information requests.

A. (Amended) A data communications system according to claim 1, wherein said network system comprises a direct broadcasting system.

6. (Amended) A data communications system according to claim 1, wherein said information request system further comprises a wireless LAN unit and said first communication medium further comprises:

a LAN ground station adapted to receive information request signals from said wireless LAN unit, wherein said LAN ground station is adapted to transmit data information requests

from said wireless LAN unit to said network system, and said network system is adapted to transfer information requests signals to said data source.

(Amended) A method for providing and controlling data communications from a direct broadcast system to a passenger carrier, said method comprising the steps of:

transmitting data information requests from an information request system to a ground station, said transmitting of data information requests provided through one of satellite transmission signals and radio transmission signals by way of selection between one of a satellite data unit and a radio frequency unit;

transmitting the data information requests from said ground station to said direct broadcast system through a network system;

accessing data information corresponding to the data information request from said direct broadcast system;

transmitting the data information from said direct broadcast system to a direct broadcast satellite; and

broadcasting the data information from said direct broadcast satellite to a receiver provided onboard said passenger carrier.

5-8. (Amended) A method according to claim, wherein said step of transmitting data information requests from said information request system to said ground station comprises:

transmitting the data information requests from said satellite data unit to an aeronautical satellite system utilizing said satellite transmission signals; and

transmitting the data information requests from said aeronautical satellite system to said ground station using said satellite transmission signals.

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(Amended) A method according to claim, wherein said step of transmitting data information requests from said information request system to said ground station comprises:

selecting one of a group of transmission mediums comprising an aeronautical satellite system, a radio frequency system, a wireless LAN system and a voice channel system for transmission of the data information requests.

7\_10. (Amended) A data communications system for a passenger carrier, said system comprising:

a transmission unit comprising a satellite data unit and a radio frequency unit, located on board said passenger carrier and operatively connected to a user interface, said transmission unit being configured to select one of said satellite data unit and said radio frequency unit for transmission of the information request signals, said satellite frequency unit configured for providing satellite transmission signals to an aeronautical satellite system, said aeronautical satellite system being adapted to provide the information request signals to said ground station, and said radio frequency unit for providing radio transmission signals to said ground station, wherein said ground station is adapted to receive the radio transmission signals and transmit said signals to said ground network;

a ground station for receiving information request signals from said transmission unit;

a direct broadcast system for providing data information;

a ground network for linking said ground station and said direct broadcast system to facilitate communications;

a direct broadcast satellite, said direct broadcast satellite adapted to interface and communicate with said direct broadcast system; and

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l) 1kl. a receiver located onboard said passenger carrier and adapted to receive data signals broadcast from said direct broadcast satellite, said receiver being operatively connected to said user interface to facilitate the transmission of said data information from said direct broadcast system to passengers.

Please add the following new claims:

8 13. (New) A data communications system according to claim 10, wherein said transmission unit further comprises a wireless LAN unit, said transmission unit being configured to select one of said satellite data unit, said radio frequency unit and said wireless LAN unit for transmission of the information request signals.

(New) A data communications system according to claim 10, wherein said transmission unit further comprises a high power amplifier, a di-plexor low-noise amplifier, and a phased-array antenna, wherein said amplifiers are configured to facilitate transmission of information request signals from said satellite data unit to said phased-array antenna, and said phased-array antenna being configured to transmit the information request signals to said ground station.

15. (New) A data communications system for retrieving data information, said data communications system comprising:

a data source comprising a network system for the storage and delivery of the data information;

an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source, wherein said transmission unit comprises a satellite data unit, a radio frequency unit, and a wireless LAN unit;

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a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising:

an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network system; and

a radio ground station adapted to receive information request signals from said radio frequency unit, wherein said radio ground station is adapted to transmit data information requests from said radio frequency unit to said network system; and

a LAN ground station adapted to receive information request signals from said wireless LAN unit, wherein said LAN ground station is adapted to transmit data information requests from said wireless LAN unit to said network system, and said network system is adapted to transfer information requests signals to said data source; a second communication medium comprising a direct broadcast satellite adapted to receive data information from said data source and to broadcast said data information to said receiver;

a receiver coupled to said data source by said second communication medium and adapted to receive the data information requested by said information request system from said data source; and

wherein said information request system is configured to select one of said aeronautical satellite system, said radio ground station and said LAN ground station from said first communication medium for transmission of data information requests.

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16. (New) A data communications system according to claim 18, wherein said information request system comprises a selection system configured to select one of said aeronautical satellite system, said radio ground station and said LAN ground station from said communication mediums for transmission of data information requests to said data source.

(New) A data communications system according to claim 15, wherein said transmission unit further comprises:

a high power amplifier:

a di-plexor low-noise amplifier; and

a phased-array antenna, wherein said high power amplifier and said di-plexor low-noise amplifier are configured to facilitate transmission of requests signals from said satellite data unit to said phased-array antenna, and said phased-array antenna being configured to transmit the request signals to said data source through said first communication medium.

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#### REMARKS

In the February 13, 2002, Office Action, the Examiner rejected claims 1-12 pending in the application. This Response cancels claims 2, 4, 5, 11 and 12, without prejudice or disclaimer, amends claims 1, 3, 6-10, and presents new claims 13-17 for consideration.

Applicant notes the Draft person's objections to the drawings, and plans to submit corrected, formal drawings upon receipt of a Notice of Allowance. After entry of the foregoing amendments, claims 1, 3, 6-10, and 13-17 (3 independent claims; 12 total claims) remain pending in the application. Reconsideration is respectfully requested.

Claims 1-12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Leuca et al., U.S. Patent No. 6,201,797, issued March 13, 2001 (hereinafter "Leuca"). In light of the amendments to claim 1, Applicant respectfully traverses this rejection.

Leuca generally discloses a method and a communications system in which a request for data transmitted by an airborne transmitter over a low-bandwidth air-to-ground communication. system uplink and received by a ground-based receiver. The requested data is then transmitted over a high-bandwidth communication system downlink, such as a DBS satellite system downlink, preferably using an MPEG-2 compression technique, and received by an airborne receiver located on the same aircraft as the airborne transmitter. The received request for data is transmitted to a data network that contains the requested data, such as the Internet or a private data network, using circuit-switched techniques. According to Leuca, the requested data includes one of video information, audio information and textual information.

In contrast to Leuca, Applicant's amended independent claim 1 recites a data communications system for retrieving data information, said data communications system comprising a data source comprising a network system for the storage and delivery of the data

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information, an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source wherein said transmission unit comprises a satellite data unit and a radio frequency unit, a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network system, and a radio ground station adapted to receive information request signals from said radio frequency unit, wherein said radio ground station is adapted to transmit data information requests from said radio frequency unit to said network system, a second communication medium comprising a direct broadcast satellite adapted to receive data information from said data source and to broadcast said data information to said receiver, a receiver coupled to said data source by said second communication medium and adapted to receive the data information requested by said information request system from said data source, and wherein said information request system is configured to select one of said aeronautical satellite system and said radio ground station from said first communication medium for transmission of data information requests. Support for the amendment to claim 1 can be found in the originally filed claims 2, 4 and 5, and in the originally filed specification. No new matter has been introduced.

Leuca does not disclose, teach or suggest various elements of claim 1. For example, Leuca fails to disclose, teach or suggest a first communication medium having both an aeronautical satellite system and a radio ground station, a second communication medium

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comprising a direct satellite is adapted to receive data information and to broadcast data information to said receiver, or wherein the information request system is configured to select one said aeronautical system and said radio ground station from said first communication medium.

While the Examiner acknowledges that Leuca does not teach an information request system further comprising a radio frequency unit, the Examiner contends that the radio frequency unit is inherently included within the aircraft 40 of Leuca. Applicant's counsel has reviewed Leuca and it is not apparent where any such information request system of Leuca comprises a transmission unit, let alone one comprising a satellite data unit and a radio frequency unit (claim 1), and a LAN unit (claim 6). Applicant respectfully submits that it is improper for the Examiner to contend that particular features are inherent properties within the prior art which are not demonstrated by the prior art, *i.e.*, arguments based on inherent properties cannot stand when there is no supporting teaching in the prior art. In re Spormann, 363 F.2d 444, 150 USPQ449, 452 (CCPA 1966) ("The inherency of an advantage and its obviousness are entirely different questions. That which may inherent is not necessarily known. Obviousness cannot be predicated on what is unknown.")

For the above reasons, Applicant submits that each and every element of independent claim 1 is not disclosed, taught or suggested by Leuca. Accordingly, claim 1 (and claims 3 and 6, each of which variously depend from claim 1) is not anticipated by Leuca, and Applicant respectfully requests the withdrawal of the rejection of claims 1, 3 and 6 under 35 U.S.C. § 102.

Furthermore, the invention of claims 1, 3 and 6 would not have been obvious to one skilled in the art having knowledge of Leuca. The Examiner cannot simply pick and choose among the individual elements of Leuca to recreate the claimed invention, but instead must look

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for some teaching or suggestion in Leuca to support their particular claim combination. Symbol Technologies, Inc. v. Opticon, Inc., 935 F.2d 1569, 1576 19 USPQ2d 1241 (Fed. Cir. 1991) (citing Smithkline Diagnostics, Inc. v. Helena Laboratories Corp., 859 F.2d 878, 887, 8 USPQ2d (BAN 1468, 1475 (Fed. Čir. 1988)).

Applicant's amended independent claim 7 recites a method for providing and controlling data communications from a direct broadcast system to a passenger carrier, said method comprising the steps of transmitting data information requests from an information request system to a ground station, said transmitting of data information requests provided through one of satellite transmission signals and radio transmission signals by way of selection between one of a satellite data unit and a radio frequency unit, transmitting the data information requests from said ground station to said direct broadcast system through a network system, accessing data information corresponding to the data information request from said direct broadcast system, transmitting the data information from said direct broadcast system to a direct broadcast satellite, and broadcasting the data information from said direct broadcast satellite to a receiver provided onboard said passenger carrier. Leuca does not disclose, teach or suggest the transmitting of data information requests provided through one of satellite transmission signals and radio transmission signals by way of selection between one of the satellite data unit and a radio frequency unit.

Applicant submits that each and every element of independent claim 7 is also not disclosed, taught or suggested by Leuca. Accordingly, claim 7 and claims 8 and 9 (each of which variously depend from claim 7) are not anticipated by Leuca, and Applicant respectfully requests the withdrawal of the rejection of claims 7-9 under 35 U.S.C. § 102.



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Claim 9 is also independently patentable over Leuca in that claim 9 further recites the step of selecting one of a group of transmission mediums comprising an aeronautical satellite system, a radio frequency system, a wireless LAN system and a voice channel system for transmission of the data information requests. Each of these elements are simply not disclosed, taught or suggested by Leuca.

Applicant's amended independent claim 10 recites a data communications system for a passenger carrier, said system comprising a transmission unit comprising a satellite data unit and a radio frequency unit, located on board said passenger carrier and operatively connected to a user interface, said transmission unit being configured to select one of said satellite data unit and said radio frequency unit for transmission of the information request signals, said satellite frequency unit configured for providing satellite transmission signals to an aeronautical satellite system, said aeronautical satellite system being adapted to provide the information request signals to said ground station, and said radio frequency unit for providing radio transmission signals to said ground station, wherein said ground station is adapted to receive the radio transmission signals and transmit said signals to said ground network, a ground station for receiving information request signals from said transmission unit, a direct broadcast system for providing data information, a ground network for linking said ground station and said direct broadcast system to facilitate communications, a direct broadcast satellite, said direct broadcast satellite adapted to interface and communicate with said direct broadcast system, and a receiver located onboard said passenger carrier and adapted to receive data signals broadcast from said direct broadcast satellite, said receiver being operatively connected to said user interface to facilitate the transmission of said data information from said direct broadcast system to passengers.

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For reasons similar to those above, Applicant submits that each and every element of independent claim 10 is not disclosed, taught or suggested by Leuca. Accordingly, claim 10 (and claims 13 and 14, each of which variously depend from claim 10) is not anticipated by Leuca, and Applicant respectfully requests the withdrawal of the rejection of claim 10 under 35 U.S.C. § 102.

In addition to the above reasons, claim 14 is not taught or suggested by Leuca for at least one other independent reason. For example, claim 14 further recites that said transmission unit "further comprises a high power amplifier, a di-plexor low-noise amplifier, and a phased-array antenna, wherein said amplifiers are configured to facilitate transmission of information request signals from said satellite data unit to said phased-array antenna, and said phased-array antenna being configured to transmit the information request signals to said ground station." These elements are simply not disclosed, taught or suggested by Leuca. Accordingly, claim 14 is independently allowable under § 102.

Applicant has also added new claims 15-17 which are believed to be allowable for the reasons set forth above with respect to Leuca.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached pages are captioned "Version with Markings to Show Changes Made."

In view of the foregoing, Applicant respectfully submits that all the pending claims fully comply with 35 U.S.C. 112 and are allowable over the prior art of record. Reconsideration of the application and allowance of all pending claims is earnestly solicited. Should the Examiner wish to discuss any of the above in greater detail or deem that further amendments should be made to



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improve the form of the claims, then the Examiner is invited to telephone the undersigned at the

Examiner's convenience.

Respectfully submitted,

Dated: 5//3/02

R. Lee Fraley Reg. No. 42,550

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Notice of Allowability    The MAILING DATE of this communication appears on the cover sheet with the correspondence address-   Claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith or pravicusly malied, a Notice of Idename (PTC-L8) or other appropriate communication will be malied in duc occurs. It is included herewith the Correspondence address-   HIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the singular of the Ciffe or upon petition by the applicant. Sea 37 CFR 1.315 and MPEP 1305.   This communication is responsive to 6/13/20.   The allowed claim(s) isare 1, 3, 6-10, 13-17, renumbering as 1-12, respectively.   The allowed claim(s) isare 1, 3, 6-10, 13-17, renumbering as 1-12, respectively.   The allowed claim(s) isare 1, 3, 6-10, 13-17, renumbering as 1-12, respectively.   Acknowledgement is made of a claim for foreign priority under 35 U.S.C. \$ 119(a)-(d).   All Discord of the criffied copies of the priority documents have been received in Application No.	·	Application I		Applicant(ş)	LIET.		
-The MAILING DATE of this communication appears on the cover sheat with the correspondence address- til claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith or previously mailed, a Notice of Allowance (PTO-16-5) or other appropriate communication will be mailed in due course.  **RIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at in sinitiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.  **This communication is responsive to \$5/13/20.**  **The allowed claim(s) islate 1, 3, 6-10, 13-17, renumbering as 1-12, respectively.**  **The drawings filled on are accepted by the Examiner.**  **Land Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  **all blb Some** c) Note of the:  **1.   Certified copies of the priority documents have been received in Application No  3.   Copies of the certified dopies of the priority documents have been received in this national stage application from the Internetional Bureau (PCT Rule 17.2(a)).  **Certified copies not received:  (a)   The trenslation of the foreign language provisional application has been received.  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 120 and/or 121. / Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a repty complying with the requirements acceded below. Filled to their year only will result in ABANDONNHEWT of this application. THIS THREE-MONTH PRIOD IS NOT XTENDABLE.  **  A SUSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (FTO-152) which gives reason(s) why the oath or declaration is deficient.  **  A JUBICANT CATHOR DECLARATION was be submitted. Note the attached provided by the examiner.**  **  A SUSTITUTE OATH OR DECLARATION must be submitted. Note the attached provided by the examiner.**  **  A J	Notice of Allowability		+,214				CTREETE TO
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or previously mailed), a Notice of Allowance (PTOL-95) or other appropriate communication will be mailed in due course.  **HIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the Initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.  **Diffice or maintain the properties of the Properties of the Initiative of the Official properties of the Initiative of the Official properties.  **Diffice or munication is responsive to \$5/13/20.**  **Diffice or munication is made of a claim for foreign priority under 35 U.S.C. \$ 119(a)-(d).  **Diffice or opies of the priority documents have been received in Application No.  **Diffice or opies of the priority documents have been received in Application No.  **Certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17:2(a)).  **Certified copies not received:  **Diffice or opies not received:  **Diffice or op	The MAILING DATE of this communication appears	s on the co	over sheet	with the co	orrespondenc	e address	
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2. Cortified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  *Certified copies not received:  5. Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  (a) The translation of the foreign language provisional application has been received.  5. Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § \$ 120 and/or 121.  Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  7. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.  8. CORRECTED DRAWINGS must be submitted.  (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  1) hereto or 2) to Paper No.  7. (b) including changes required by the proposed drawing correction filed  2 provided by the examiner.  (c) including changes required by the attached Examiner's Amendment/Comment or in the Official Draftsperson.  9. Identifying indicia such as the application number (see 37 CFR 1.84(e)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.  9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.  Attachment(s)  1   Notice of Informal Patent Application (PTO-152)   Information Discours Statement(s) (PTO-1449), Paper No(s).  1   Examiner		rity under	35 U.S.C.	§ 119(a)-(c	d).	•	1,
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Page 2

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## REASONS FOR ALLOWANCE

- 1. Claims 1, 3, 6-10 and 13-17 are allowed. Claims 2, 4, 5, 11 and 12 have been canceled.
- 2. The following is an examiner's statement of reasons for allowance: the prior art made of record does not teach or fairly suggests in combination a data communications system for retrieving data information, said data communications system comprising: a data source comprising a network system for the storage and delivery of the data information; an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source wherein said transmission unit comprises a satellite data unit and a radio frequency unit; a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising: an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network system; and a radio ground station adapted to receive information request signals from said radio frequency unit, wherein said radio ground station is adapted to transmit data information requests from said radio frequency unit to said network system; a second communication medium comprising a direct broadcast satellite adapted to receive data information from said data source and to broadcast said data information to said receiver; a receiver coupled to said data source by said second communication medium and adapted to receive the data information requested by said information request system from said data source; and wherein said information request system is configured

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to select one of said aeronautical satellite system and said radio ground station from said first communication medium for transmission of data information requests.

The prior art made of record fails to teach in combination a method for providing and controlling data communications from a direct broadcast system to a passenger carrier, said method comprising the steps of: transmitting data information requests from an information request system to a ground station, said transmitting of data information requests provided through one of satellite transmission signals and radio transmission signals by way of selection between one of a satellite data unit and a radio frequency unit; transmitting the data information requests from said ground station to said direct broadcast system through a network system; accessing data information corresponding to the data information request from said direct broadcast system; transmitting the data information from said direct broadcast system to a direct broadcast satellite; and broadcasting the data information from said direct broadcast satellite to a receiver provided onboard said passenger carrier.

The prior art made of record fails to teach a data communications system for a passenger carrier, said system comprising: a transmission unit comprising a satellite data unit and a radio frequency unit, located on board said passenger carrier and operatively connected to a user interface, said transmission unit being configured to select one of said satellite data unit and said radio frequency unit for transmission of the information request signals, said satellite frequency unit configured for providing satellite transmission signals to an aeronautical satellite system, said aeronautical satellite system being adapted to provide the information request signals to said ground station, and said radio frequency unit for providing radio transmission signals to said

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ground station, and said radio frequency unit for providing radio transmission signals to said ground station, wherein said ground station is adapted to receive the radio transmission signals and transmit said signals to said ground network; a ground station for receiving information request signals from said transmission unit; a direct broadcast system for providing data information; a ground network for linking said ground station and said direct broadcast system to facilitate communications; a direct broadcast satellite, said direct broadcast satellite adapted to interface and communicate with said direct broadcast system; a receiver located onboard said passenger carrier and adapted to receive data signals broadcast from said direct broadcast satellite, said receiver being operatively connected to said user interface to facilitate the transmission of said data information from said direct broadcast system to passengers.

The prior art fails to in combination a data communications system for retrieving data information, said data communications system comprising: a data source comprising a network system for the storage and delivery of the data information; an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source, wherein said transmission unit comprises a satellite data unit, a radio frequency unit, and a wireless LAN unit; a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising: an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network

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system; and a radio ground station adapted to receive information request signals from said radio frequency unit, wherein said radio ground station is adapted to transmit data information requests from said radio frequency unit to said network system; and a LAN ground station adapted to receive information request signals from said wireless LAN unit, wherein said LAN ground station is adapted to transmit data information requests from said wireless LAN unit to said network system, and said network system is adapted to transfer information requests signals to said data source; a second communication medium comprising a direct broadcast satellite adapted to receive data information from said data source and to broadcast said data information to said receiver; a receiver coupled to said data source by said second communication medium and adapted to receive the data information requested by said information request system from said data source; and wherein said information request system is configured to select one of said aeronautical satellite system, said radio ground station and said LAN ground station from said first communication medium for transmission of data information request.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on statement of Reasons for Allowance."

Page 6

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (703) 308-0148. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (703) 305-4366.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Brenda Pham June 13, 2002

> WELLINGTON CHIN SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARK Washington, D.C. 20231

#### NOTICE OF ALLOWANCE AND FEE(S) DUE

28

7590 06/17/20

HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245

EXA	MINER
PHAM, I	BRENDA H
ARTINIT	CLASS-SUBCLASS

2664

370-316000

DATE MAILED: 06/17/2002

APPLICATION NO.	FILING DATE .	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
00/204 214	12/20/1009	TOTALLI LIBETT	A 62-25262 TTS	3083

TITLE OF INVENTION: APPARATUS AND METHOD FOR DATA COMMUNICATIONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
pomprovisional	NO	\$1280	\$0	\$1280	09/17/2002

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED, THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

## MOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

B. If the status is the same, pay the TOTAL FEE(S) DUE shown

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

■ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEB unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Page 1 of 3

PTOL-85 (REV. 04-02) Approved for use through 01/31/2004.



#### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE Commissioner for Patents Washington, D.C. 20231

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks I through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a now correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any consecuence are use Block 1)

Note: A certificate of mailing can only be used for domestic mailings of the

HONEYWELL INTERNATIONAL INC.
101 COLUMBIA ROAD
P O BOX 2245

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate, cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

101 COLUMBIA ROAD
POBOX 2245
MORRISTOWN, NJ 07962-2245

Thereby certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below.

	transpired to the OSI 10, on the date indicated below.	ſ
(Depositor's name		ŀ
(Date		ľ

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/224,214	12/30/1998	JOHN H. HIETT	A62-25262-US	3982

TITLE OF INVENTION: APPARATUS AND METHOD FOR DATA COMMUNICATIONS

APPLN, TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1280	\$0	\$1280	09/17/2002
EXAM	IINER	ART UNIT	CLASS-SUBCLASS		
PHAM, BI	RENDA H	2664	370-316000	/	
CFR 1.363).  Change of correspond	ence address or indication of		2. For printing on the patent the names of up to 3 registers or agents OR, alternatively, single firm (having as a me	ed patent attorneys (2) the name of a	
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PLEASE NOTE: Unless been previously submitte (A) NAME OF ASSIGN	an assignee is identified b d to the USPTO or is being EE		I appear on the patent. Inclusion cover, Completion of this form of the SIDENCE: (CITY and STATE C	n of assignee data is only appropri is NOT a substitute for filing an ass OR COUNTRY)	ate when an assignment has ignment.
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09/224,214	12/30/1998	JOHN H. HIETT	A62-25262-US	3982
128	7590 06/17/2002		EXAMIN	ER
HONEYWEL	L INTERNATIONAL INC		PHAM, BRE	NDA H
P O BOX 2245			ART UNIT	PAPER NUMBER
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Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1995 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

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